

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application.

Listing of Claims:

1-12. (Canceled)

13. (Currently Amended) A method for producing isolated recombinant cells expressing heterologous hCD4 and mCXCR-4, said recombinant cells having a polypeptide which binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 envelope protein (env) thereby promoting cell membrane fusion with a T-cell-line-tropic HIV-1 in the presence of human CD4, comprising:

culturing a transformant comprising an expression vector comprising a nucleotide sequence selected from the group consisting of:

- (a) a nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2, wherein said polypeptide binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 env;
- (b) a nucleotide sequence comprising SEQ ID NO: 1, wherein the nucleotide sequence encodes a polypeptide which binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 env;

(c) a nucleotide sequence from a murine cell that hybridizes under stringent conditions of 42°C, 5 x SSPE, 50% formamide, 1 x Denhardt's reagent, 10% dextran disodium sulfate, and 0.1% SDS with the entire complementary nucleotide sequence of any one of (a) to (b) above, and encoding a polypeptide which binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 env;

under conditions wherein the transformant is capable of expressing the expression vector.

14-15. (Cancelled)

16. (Currently Amended) A A cultured recombinant cell expressing heterologous hCD4 and mCXCR-4, wherein said mCXCR-4 is encoded by a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2, wherein said polypeptide which binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 envelope protein (env) thereby promoting cell membrane fusion with a T-cell-line-tropic HIV-1 in the presence of human CD4;

(b) a nucleotide sequence comprising SEQ ID NO: 1, wherein the nucleotide sequence encodes a polypeptide which binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 env thereby promoting cell membrane fusion with a T-cell-line-tropic HIV-1 in the presence of human CD4;

(c) a nucleotide sequence from a murine cell that hybridizes under stringent conditions of 42°C, 5 x SSPE, 50% formamide, 1 x Denhardt's reagent, 10% dextran disodium sulfate, and 0.1% SDS with the entire complementary nucleotide sequence of any one of (a) to (b) above, and encoding a polypeptide which binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 env thereby promoting cell membrane fusion with a T-cell-line-tropic HIV-1 in the presence of human CD4;

and wherein said recombinant cell is infected with T-cell-line-tropic HIV-1 when contacted therewith.

17-21. (Cancelled)

22. (Currently Amended) A kit for detecting a T-cell-line-tropic HIV-1 infection, comprising isolated recombinant cells expressing heterologous hCD4 and mCXCR-4, wherein said mCXCR-4 is encoded by a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding a polypeptide comprising SEQ ID NO: 2, wherein said polypeptide binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 envelope protein (env) thereby promoting cell membrane fusion with a T-cell-line-tropic HIV-1 in the presence of human CD4;

(b) a nucleotide sequence comprising SEQ ID NO: 1, wherein the nucleotide sequence encodes a polypeptide which binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-

line-tropic HIV-1 env thereby promoting cell membrane fusion with a T-cell-line-tropic HIV-1 in the presence of human CD4;

(c) a nucleotide sequence from a murine cell that hybridizes under stringent conditions of 42°C, 5 x SSPE, 50% formamide, 1 x Denhardt's reagent, 10% dextran disodium sulfate, and 0.1% SDS with the entire complementary nucleotide sequence of any one of (a) to (b) above, and encoding a polypeptide which binds to a murine PBSF/SDF-1 and acts as a binding site for T-cell-line-tropic HIV-1 env thereby promoting cell membrane fusion with a T-cell-line-tropic HIV-1 in the presence of human CD4.

23-26. (Canceled)

27. **(Previously Presented)** The method according to claim 13, wherein said nucleotide sequence is SEQ ID NO: 1.

28. **(Previously Presented)** The method according to claim 13, wherein said polynucleotide sequence is (a).

29. **(Previously Presented)** The recombinant cell according to claim 16, wherein said nucleotide sequence is SEQ ID NO: 1.

30. (**Previously Presented**) The recombinant cell according to claim 16, wherein said polynucleotide sequence is (a).

31. (**Previously Presented**) The recombinant cell according to claim 16, wherein said recombinant cell is derived from a cell line selected from the group consisting of: a Chinese hamster ovary cell line, a human colon cancer cell line, SW480 cells, a human osteoblastsarcoma cell line, HOS cells, a human glioblastoma cell line, and U87MG cells.

32. (**Previously Presented**) The kit according to claim 22, wherein said nucleotide sequence is SEQ ID NO: 1.

33. (**Previously Presented**) The kit according to claim 22, wherein said polynucleotide sequence is (a).

34. (**Previously Presented**) The kit according to claim 22, wherein said HIV-1 infection is a strain NL432 or strain IIIb infection.

35. (**Canceled**)